February-14-13 1:30:13 PM Item ID: D3072-2 Accept *N900040100* Setup Start **Revision ID:** Item Name: Bracket Start Qty: 6.00 **Start Date:** 2/14/13 **Cust Item ID:** Required Date: 2/22/13 Req'd Qty: 6.00 **Customer:** Reference: Run Process Plan: MLJ Date: 13-02-15 Tooling: **Approvals:** Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Accept Reject Reject Work Center ID Description **Run Hours** Code Qty Oty Number Stamp Draw Nbr **Revision Nbr** D3072 Rev A1 100 0.00 FLOW WATER JET *100* Waterjet 0.00 Memo FLOW CNC Waterjet 1-Cut as per Dwg D3072 (D3072-101 flat pattern)Dwg 5052 ,090 Rev: A 2-Deburr if necessary (H32) 110 QC2-Inspect parts off machine FAI/FAIB 0.00 *110* 6 0 Jm3.07.02 QC 0.00 Memo Quality Control 120 QC8- Inspect parts - second check 0.00 *120* O 13-07-403 QC 0.00 Memo Quality Control

NCR:	Yes	/	No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _	Date:	
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						·	WILLIAM		QA Closed:	Date:	
Work Orde	er:				DISPOSITION			AGAINST DE	PARTMENT,	PROCESS	
Part N					Rework Scrap Use-as-is Work Order Update	1 1	Skid-tube Machining moforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initial	Act	tion	Sign &	- 	
Cause	Date	Step	Qty	•	or Non-conformance	Chief Eng	Descr	ription	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator	_		ļ								
Material			İ								
Setup	_										
Other											
Process	_										
Supplier											
Training						}					
Unapproved			<u> </u>				<u> </u>				
						AULT CATE	GORY				
Landii	ng Gear				General	<u></u>			1		٦
	Bendir	•		. -	Bend	Grain			Ovalized		Pressure/Forced
		Not Conce	ntric to	o/s	BOM/Route	Hardw			Over/Under	 	Temperature/Cure
	Cracks			-	Broken/Damaged		tion Incomplete		Part Incorre		Weld
1		d/Crimped	-	<u> </u>	Burrs	—	tions Incomplete/l	Unclear	Part Lost/M	ssing	Wrong Stock Pulled
	Cuffs				Contamination		enance 	-	Part Moved		
	Heat T			ļ	Countersink	Mislab		-	Positioned V		7
		tion Strip in	Tube	<u> </u>	Cut Too Short	Misrea	d	<u></u>	Power Loss/	Surge	Other
		in Bend		<u> </u>	Drill Holes	Offset	- 1 11				
		Waves in I		n	Drawing		Calibration				
	Turning Sequence Finish				Sequence						
	Wave/	Twist in Tul	be		Folio	Outsid	e Dimensions				

Work Order ID 97268

February-14-13 1:30:13 PM

97268

Page 2

Item ID: D3072-2 Accept *N900040100* Setup Start **Revision ID:** Item Name: Bracket Start Qty: 6.00 **Start Date:** 2/14/13 **Cust Item ID:** Required Date: 2/22/13 Req'd Qty: 6.00 **Customer:** Reference: Run Process Plan: Date: **Approvals:** Tooling: Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Tool ID Set Up/ Tool # Plan Accept Reject Reject Insp. **Work Center ID** Description **Run Hours** Code Qty Oty Number Stamp 130 0.00 Small Fab *130* Small Fab 0.00 Memo Small Fab 1- deburr if necessary2- Bend as per dwg D3072 140 QC5- Inspect part completeness to step on W/O *140* QC Memo Quality Control 150 Chemical Conversion Coat per QSI005 4.1 0.00 6 76,13.7.15 *150* HandFinish 0.00 Memo Hand Finishing

NCR:	Voc	/	No
INC.D.	162	,	INU

												DQA:	Date	:
NCR:	/es	/ No					WORK ORDER NON-C	O	NFOR	MANCE / UPDATE				
				······································								QA Closed:	Date	:
Vork Orde	er:						DISPOSITION			AGAINST	DE	PARTMENT/	PROCESS	
Part f	Rewor No Scra Use-as-				Rework Scrap Use-as-is Work Order Update		Skid-tube Crosstube Water Jet Engineering Machining Small Fab Prod. Eng. Coor. Quality Thermoforming Finishing Rec/Store/Packaging Other Large Fab Composite Supplier					Quality		
Root					Desci	ripi	tion of work order update		nitial	Action		Sign &		
Cause		Date	Step	Qty		or	Non-conformance	Ch	ief Eng	Description		Date	Verification	QC Inspector
oc/Data quip/Tooling perator laterial etup ther rocess upplier raining														
napproved								<u>L</u>	i na					
							F	AUL	T CATE	GORY				
Landi	ng (Gear					General		* :			-	_	
		Bending Centre No Cracks	ot Concer	ntric to	o/s		Bend BOM/Route Broken/Damaged		Grain Hardwa	are ion Incomplete		Ovalized Over/Under Part Incorre	<u> </u>	Pressure/Forced Temperature/Cure Weld
		Crushed/0	Crimped		-		Burrs		1 `	tions Incomplete/Unclear		Part Lost/Mi	⊢	Wrong Stock Pulled
		Cuffs	F		ŀ	—	Contamination		1	enance		Part Moved	~ L	
		Heat Trea	it		r		Countersink	\vdash	Mislabe	eled		Positioned V	Vrong	
		Inspection	n Strip in	Tube	T	7	Cut Too Short		Misrea	d		Power Loss/	'Surge	Other
		Ripples in					Drill Holes	Offset						
		Torque W	aves in E	Extrusio	n		Drawing		Out of	Calibration				
		Turning S	equence				Finish		Out of	Sequence				
		4 · H H			Outside	e Dimensions								

February-14-13 1:30:13 PM Item ID: D3072-2 Accept *N900040100* Setup Start **Revision ID:** Item Name: Bracket Start Oty: 6.00 Start Date: 2/14/13 **Cust Item ID:** Required Date: 2/22/13 Req'd Qty: 6.00 **Customer:** Reference: Run Approvals: **Process Plan:** Date: Tooling: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Tool ID Tool # Plan Reject Accept Reject Insp. Work Center ID Description **Run Hours** Code Qty **Oty** Number Stamp 160 Black Sandtex(Ref:4.3.5.7) per QSI005 4.3 0.00 *160* Powdercoat 0.00 Powder Coating 170 QC3- Inspect Part Finish *170* 0.00 13 = 7. 16 QC Memo Quality Control

180

Identify as per dwg & Stock Location: 51025 0.00

120

Packaging Memo

Packaging

0.00

6x M.W. 13-07-16

WORK ORDER NON-CONFORMANCE / UPDATE NCR: Yes / No QA Closed: Date: **AGAINST DEPARTMENT/PROCESS DISPOSITION** Work Order: Engineering Water Jet Skid-tube Crosstube Rework Prod. Eng. Coor. Quality Part No. Machining Small Fab Scrap Rec/Store/Packaging Use-as-is Thermoforming Finishing Other Large Fab Composite NCR No. Work Order Update Supplier Description of work order update Initial Action Sign & Root Verification Step or Non-conformance Chief Eng Description Date QC Inspector Date Qty Cause Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved **FAULT CATEGORY Landing Gear** General Pressure/Forced Grain Ovalized Bend Bending BOM/Route Over/Under tolerance Temperature/Cure Centre Not Concentric to O/S Hardware Weld Broken/Damaged Cracks Inspection Incomplete Part Incorrect Wrong Stock Pulled Crushed/Crimped. Burrs Instructions Incomplete/Unclear Part Lost/Missing Cuffs Contamination Maintenance Part Moved Heat Treat Countersink Mislabeled **Positioned Wrong** Misread Power Loss/Surge Other Inspection Strip in Tube Cut Too Short **Drill Holes** Offset Ripples in Bend

Out of Calibration

Out of Sequence

Outside Dimensions

DQA: Date:

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish Folio **Quality Control**

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February-14-13 1:30:13 PM Item ID: D3072-2 Accept *N900040100* Setup Start **Revision ID:** Item Name: Bracket **Start Date:** Start Qty: 6.00 2/14/13 **Cust Item ID:** Required Date: 2/22/13 **Req'd Qty:** 6.00 **Customer:** Reference: Run Process Plan: Date: _ ____ Approvals: **Tooling:** Date: SPC (Y/N): Date: Date: Sequence ID/ Operation Tool ID Set Up/ Tool # Plan Accept Reject Reject Insp. Work Center ID Description **Run Hours** Code Qty Qty Number Stamp 190 QC21- Final Inspection - Work Order Release 0.00 *190* QC 0.00 Memo

MB-07-14

									DQA:	Date:	
NCR: Yes	/ No				WORK ORDER NON-C	CONFORM	MANCE / UP		QA Closed:	Date:	
Work Order:					DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part No.					Rework Scrap Use-as-is Work Order Update	Thern	Skid-tube Machining noforming Large Fab	Crosstube Small Fab Finishing Composite		Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initial	Ad	ction	Sign &		
Cause	Date	Step	Qty		or Non-conformance	Chief Eng	Desc	cription	Date	Verification	QC Inspecto
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training											

Landing C	Gear	General			
	Bending	Bend	Grain	Ovalized	Pressure/Forced
	Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure
	Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld
	Crushed/Crimped	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled
	Cuffs	Contamination	Maintenance	Part Moved	•
	Heat Treat	Countersink	Mislabeled	Positioned Wrong	 _
	Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge	Other
	Ripples in Bend	Drill Holes	Offset	-	
	Torque Waves in Extrusion	Drawing	Out of Calibration		
	Turning Sequence	Finish	Out of Sequence		
	Wave/Twist in Tube	Folio	Outside Dimensions		

FAULT CATEGORY

Unapproved

Work Order ID:

97268

Parent Item:

D3072-2

Parent Item Name:

Bracket

Start Date: 2/14/13

Required Date: 2/22/13

Start Qty: 6.00

Required Qty: 6.00

Comments:

IPP B02.01.18Flat pattern created on dash 101.NG

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M5052H32S.090 5052-H32 .090 Sheet		Purchased	No			100	sf	40.2600	0.1167	9 .737052 6		* * * *	JMB-07-
				Location		Loc Qty	Lo	c Code					
				MAT022		40.26			<u> </u>				
				1186	541	20.26			***************************************				
				1217	780	20			121	780			

Page 1

NCR:	Yes	1	No
NCK.	162	/	110

DQA: _____ Date: ____

NCR: Y	es / I	٧o					WORK ORDER NON-C	:ON	NFORN	иance / Up	DATE				
	•											QA	Closed:	Date:	
Nork Orde	r·						DISPOSITION				AGAINST D	EPAF	TMENT	PROCESS	
work Orde	'· 						Rework			Skid-tube	Crosstube	7		Water Jet	Engineering
Part N	0.						Scrap			Machining	Small Fab		Pro	d. Eng. Coor.	Quality
							Use-as-is			noforming	Finishing	7	Rec/Stor	e/Packaging	Other
NCR N	o		-				Work Order Update			Large Fab	Composite			Supplier	
Root					Desc	ript	ion of work order update		nitial	Ac	tion	9	ign &		
Cause	Da	te	Step	Qty		or	Non-conformance	Ch	ief Eng	Desc	ription		Date	Verification_	QC Inspector
oc/Data													:		
quip/Tooling			•												
perator															
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etup	_														
ther	_	1													
rocess	_														
upplier		l			:										
raining	_														
Inapproved							E		T CATE	GORY				<u> </u>	
Landir	ig Gear						General		····	-					
[Bend	ing			Γ	٦	Bend		Grain			\neg_{ov}	alized	[Pressure/Forced
ŀ		_	t Concer	ntric to	o/s -		BOM/Route		Hardwa	are		Tov	er/Under	tolerance	Temperature/Cure
Ì	Crac				·	_	Broken/Damaged		Inspect	ion Incomplete	<u></u>	Pa	rt incorre	ct	Weld
ļ			rimped.		ľ	_	Burrs		4	tions Incomplete	/Unclear	Pa	rt Lost/M	issing	Wrong Stock Pulled
ľ	Cuffs					\neg	Contamination		Mainte	enance		Pa	rt Moved		
ľ	Heat	Treat	:		Γ	一	Countersink		Mislabe	eled		Po	sitioned V	Vrong	<u>_</u>
. [Insp	ection	Strip in	Tube			Cut Too Short		Misrea	d		Po	wer Loss/	Surge	Other
Ī	Ripp	es in	Bend				Drill Holes		Offset						
	Torq	ue Wa	aves in E	xtrusio	n [Drawing		Out of	Calibration					
	Turn	ing Se	quence				Finish		Out of	Sequence					
	Wav	e/Twi	st in Tub	oe .		\Box	Folio		Outside	e Dimensions					

DART AEROSPACE LTD	Work Order:	97268
Description: Bracket	Part Number:	D3072-2
Inspection Dwg: D3072 Rev: A1		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X	First Article		Prototype
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.219 x 0.475	(+0.005/-0.001)x(+/-0.010)	0,219"x0475	~		ν	JLMOI
Ø0.640	+0.008/-0.001	0.640"	_		V	
0.512	+/-0.010	0.512"			V	
0.932	+/-0.010	0.937"	_		ν	
4.324	+/-0.010	4.325	-		٧	
3.888	+/-0.010	3.888"	_		ν	
0.975	+/-0.010	0976	_		V	
3.224	+/-0.010	3.227	_		ν	
0.350	+/-0.010	6,349"	<u> </u>		V	
2.776	+/-0.010	2.778"	-		٧	
3.800	+/-0.010	3.806"	_		ν	
0.090	+/-0.010	0.089"	_		ν	
GRAS	in Direction		<u> </u>		•	
			· · · · · · · · · · · · · · · · · · ·			,
		- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				-
	481					

Measured by: Jm	Audited by:	000	Prototype Approval:	N/A
Date: 13-07-07	Date:	B-07-03 m	Date:	N/A

Rev	Date	Change	Revised by	Approved	
Α	09.12.14	New Issue	KJ/JLM /		

